



Operational Risk Management



Tactical Safe

Jonathan Mckinney
MCB Camp Pendleton



Operational Risk Management

MCO 3500.27A (B)

OPNAVINST 3500.39A (B)

**FM 100-14 Risk
Management**

Purpose of ORM

- The purpose of ORM can be defined as enhancing hazard identification in the operational/Off-duty environment in order to eliminate risks or reduce them to an acceptable level.
- ORM follows a five step sequence, with three levels of application. It is also a **closed-loop** process applicable to most operational and organizational situations and environments.

ORM Goals

- Ensure Mission Accomplishment
- Enhance Efficiency & Effectiveness of all command personnel in the performance of the mission.
- Enhance Units Force Protection
LETHALITY AND
SURVIVABILITY

ORM Implementation

- Assist Commander (Commanders Intent, Mission Essential Task Listings (METL's))
- Provide ORM Training
- Assist and provide Commanders with ORM Assessments
- Develop/Implement Controls
- Provide Feedback

Data Resources

**DOD,
MCO's
Navy
Regs**

**SM
E**

**LOI/
POI's**

**Maintenanc
e
Data**

**Installati
on
Policies**

**SOP'
s**

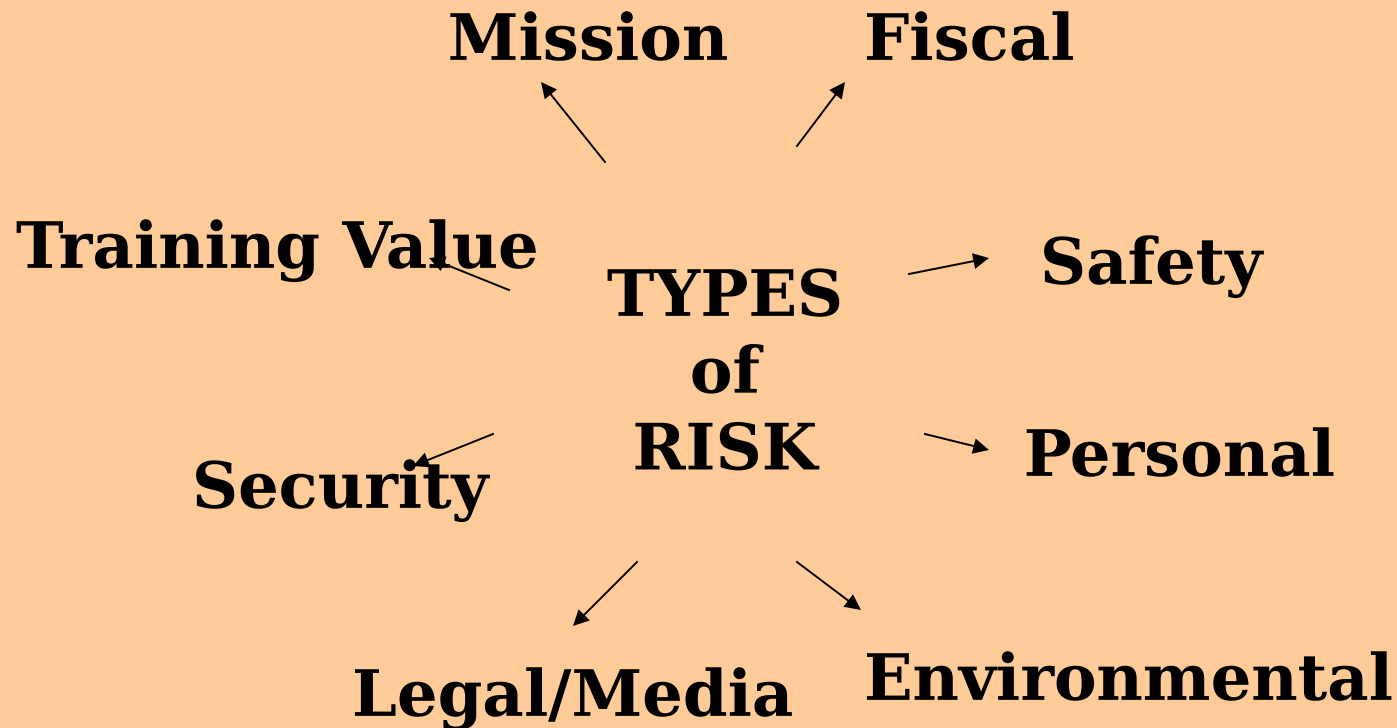
**Inspectio
n
History**

**Tech
Manu
als**

**Medi
cal
Report
s**

**Unit
Orders/
Directives**

Demensions of Risk



**Changing one element often
influences other
elements positively or negatively**

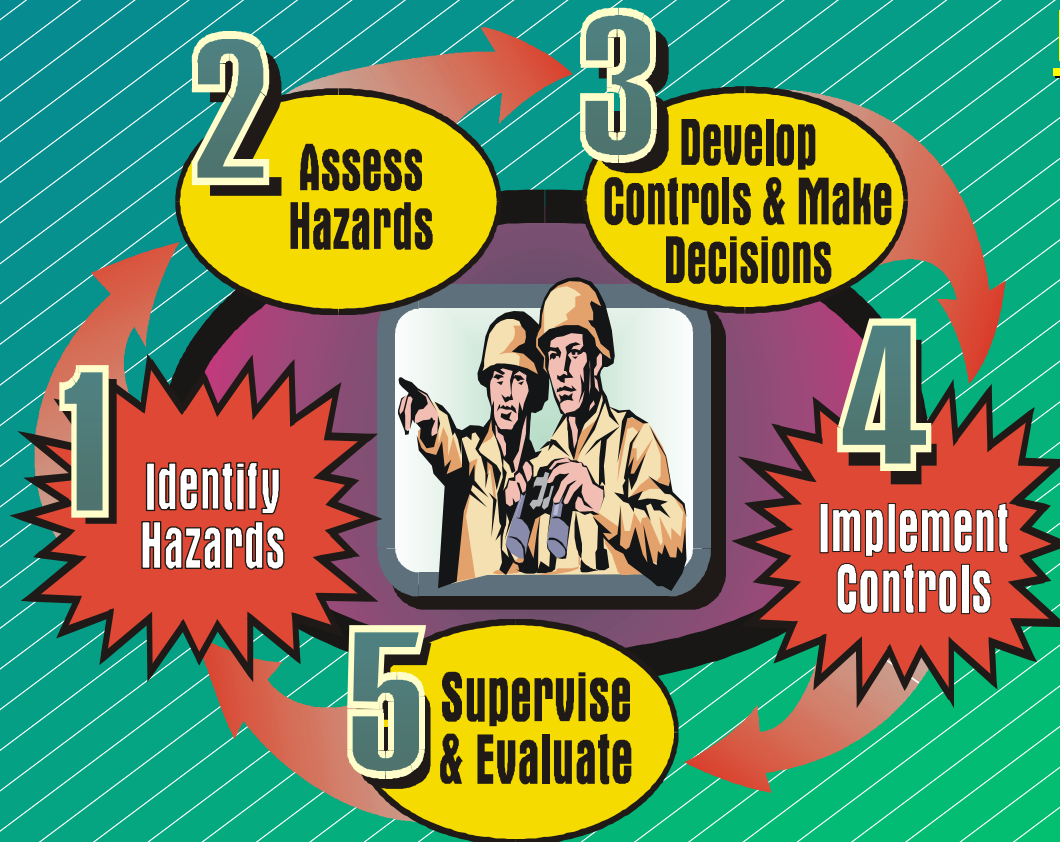
Why Risk Controls Often Fail

- The control is inappropriate for the
- Operators become complacent
- Costly financial constraints
- It is overmatched by other priorities
- It is misunderstood
- Not following progress of control m
- Environmental constraints
- Lack of supervision



Risk Management Process

STEP 1: Identify Hazards



Identify Hazards

Identify hazards to protect the force. Consider all aspects of current and future situations, environment, and known historical problem areas

Risk Management Process

Before You Seek The Hazards Get The Big Picture

- What are the Unit missions
- What are the Units capabilities
- What are potential critical contingency mission/capabilities.
- What are the unit critical system components.
- What are the critical infrastructure elements (power, light, water, fuel, supplies)

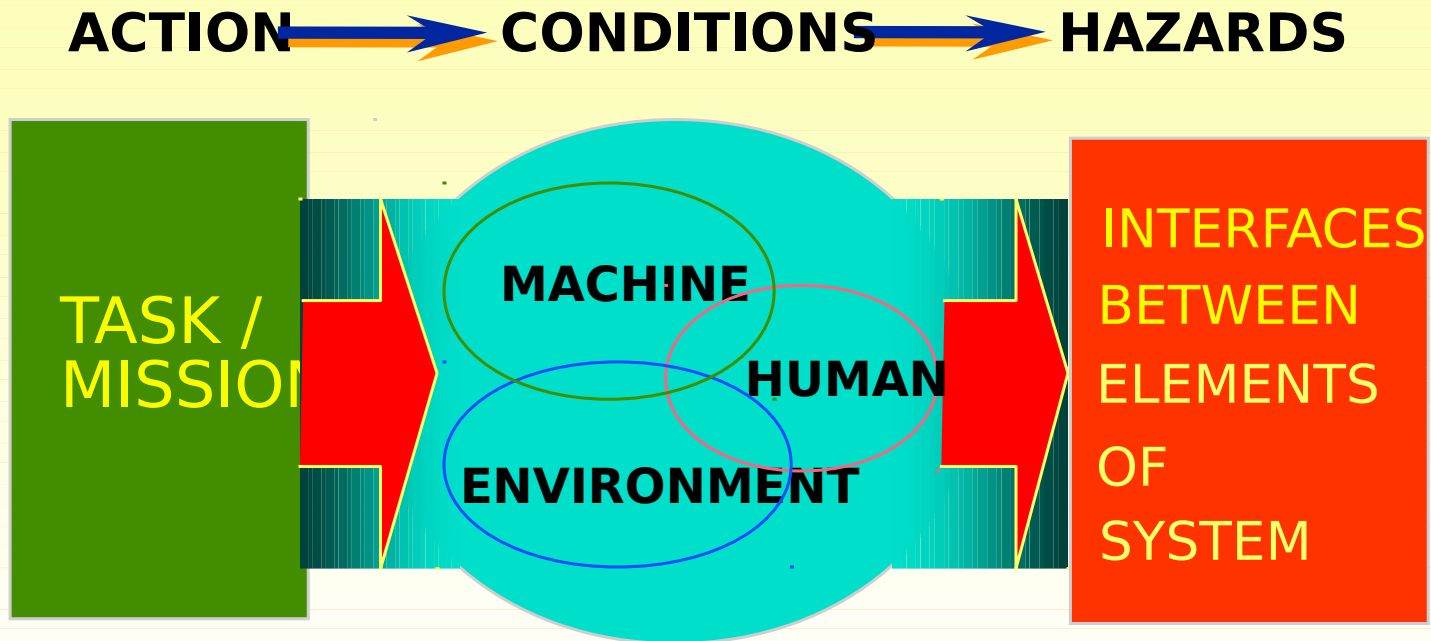
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What are Hazards?



Hazard Any real or potential condition that can cause injury, illness, or death of personnel, damage to or loss of equipment, or mission degradation.

Accident Cause Factors

HUMAN

MATERIAL

ENVIRONMENT



Cause Factors

- ***Human Error*** - an individual's actions or performance is different than what is required and results in or contributes to an accident.
- ***Material Failure/Malfunction*** - a fault in the equipment that keeps it from working as designed, therefore causing or contributing to an accident.
- ***Environmental Conditions*** - any natural or manmade surroundings that negatively affect performance of individuals, equipment or materials and causes or contributes to an accident.

Sources of Human Errors

Individual Failure - Personnel knows and is trained

to standards but elects not to follow the standard

Leader Failure - Leader does not enforce known standard.
(self-discipline).

Training Failure - Personnel not trained to known standard (insufficient, incorrect or no training on task).

Standards Failure -

Standards/procedures not clear or practical, or do not exist

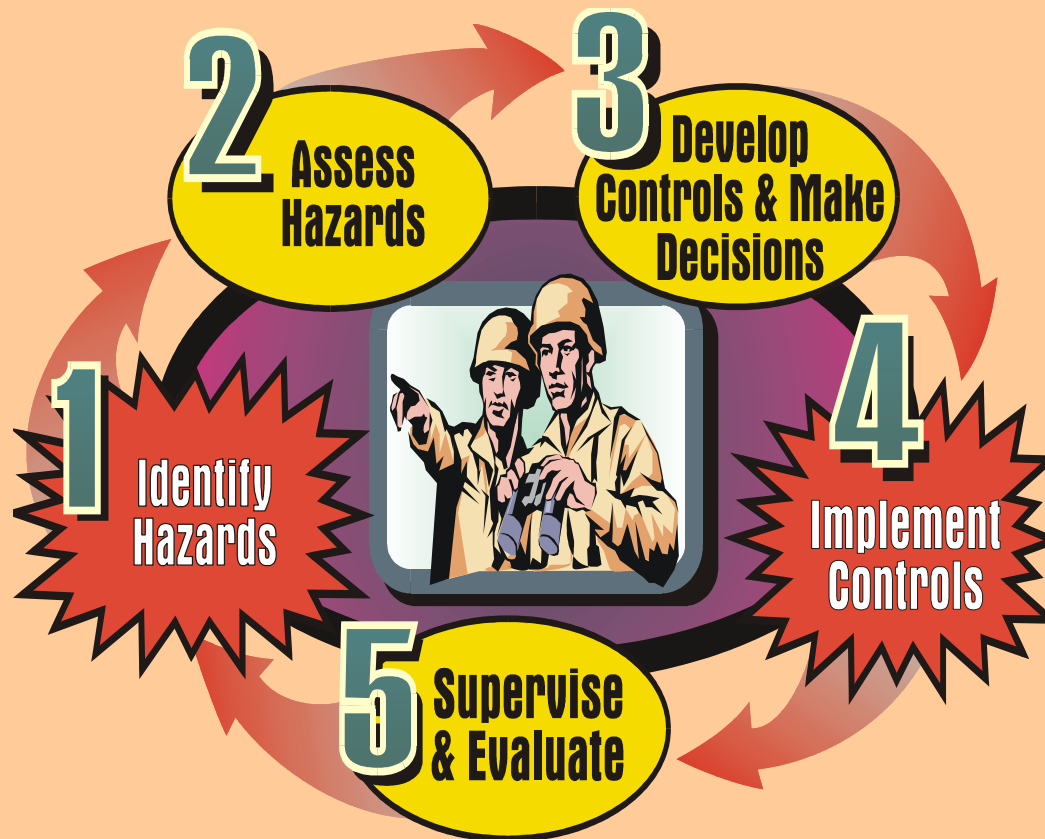
Support Failure - Equipment/material improperly designed to meet performance standards.

the difference between low and e-high risk is..



inches
OR seconds

STEP 2: Assess Hazards

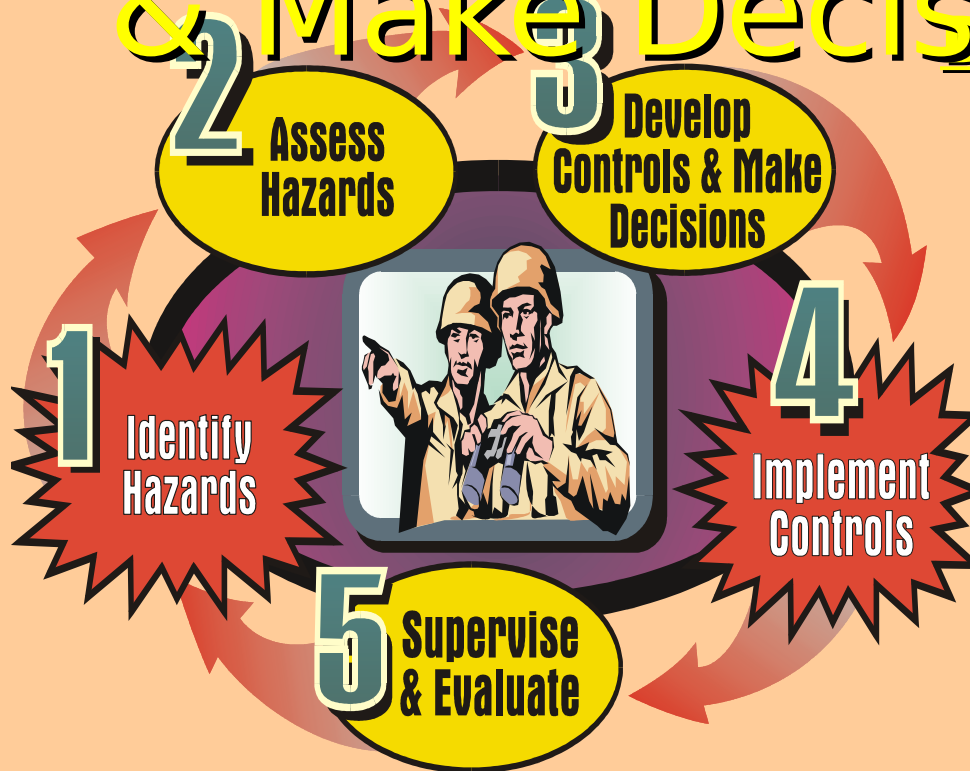


Risk Management Process

Assess Hazards

Assess hazards to determine risks. Assess the impact of each hazard in terms of potential loss and cost, based on probability and severity.

STEP 3: Develop Controls & Make Decision



Risk Management Process

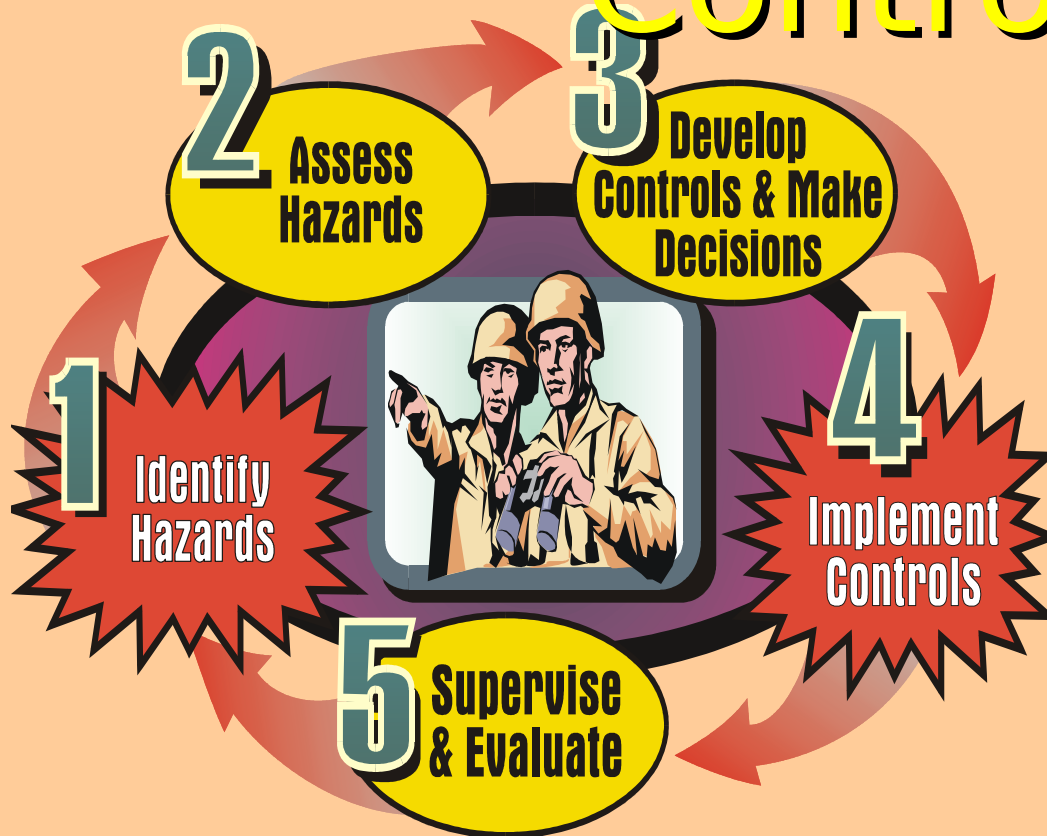
Develop Controls & Make Risk Decisions

Develop control measures that eliminate the hazard or reduce its risk to an acceptable level. As control measures are developed, risks are reevaluated until all risks are reduced to a level where benefits outweigh potential cost

Risk Control Options

- Engineering
 - ✓ New Technology, design, substitute material
- Education
 - ✓ Collective/individual training
- Administrative
 - ✓ Establishing written programs, limiting exposure
- Physical
 - ✓ Barriers, road guards, warning signs
- Operational
 - ✓ Map exercises, rehearsals, pace of

STEP 4: Implement Controls

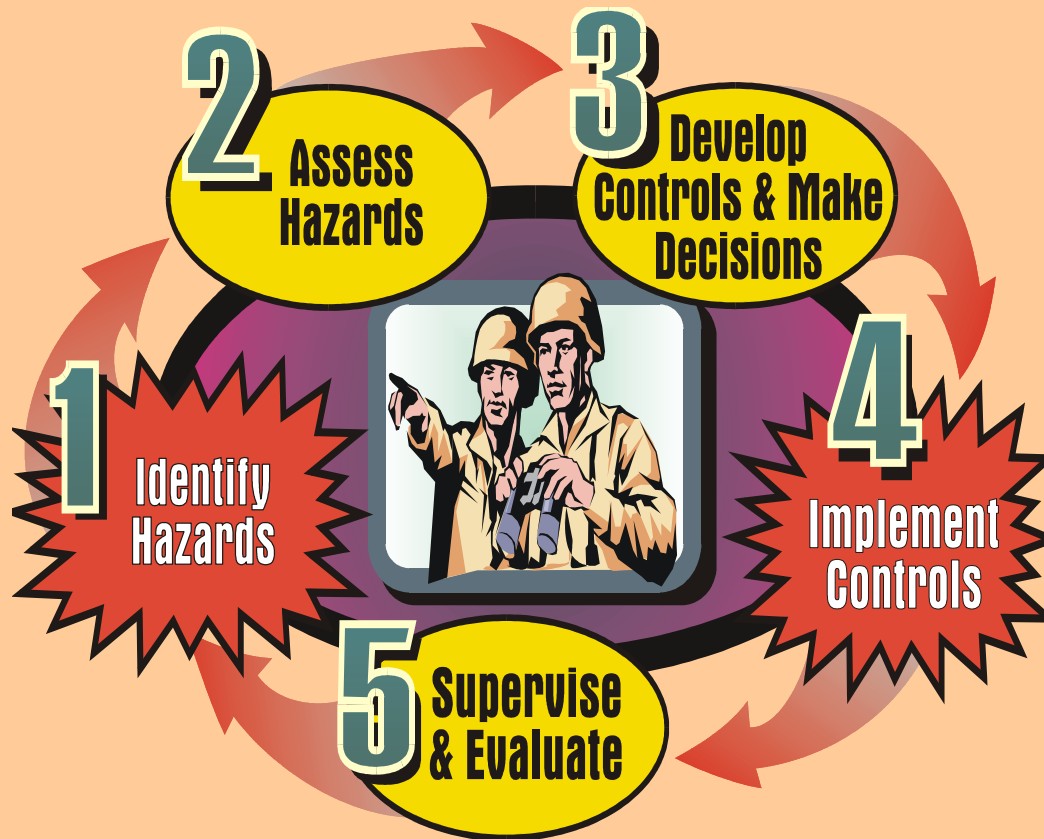


Implement Controls

Put controls in place that eliminate the hazards or reduce their risks.

Risk Management Process

STEP 5: Supervise & Evaluate



Risk Management Process

Supervise & Evaluate

Perform to, and enforce standards and controls. Evaluate the effectiveness of controls and adjust/ update as necessary.

Supervise

All personnel are responsible for:
(self-discipline)

Performing to standard

Executing controls

**Recognizing and reporting unsafe acts
or conditions**

Leaders are responsible for enforcement

Supervise - HOW

- Monitor and Enforce controls
- Use evaluation Techniques
- Examine data
- Evaluate effectiveness of controls and
Revise if necessary

Evaluation Tools

- Spot Checks/Back Briefs
- Audits/Inspections
- Readiness Reports
- Licensing
- Rehearsals
- Certification Procedures

Risk Threatens Combat Power and It's Capabilities



Three levels of Application

- TIME CRITICAL
On the run consideration
- DELIBERATE
Application of the 5 Step Process
- IN-DEPTH
Complete the 5 Step Process with
detail analysis; Battle Plans, Joint OPS,
Etc.

ORM Application

Time Critical ORM (Little Time Available)	Deliberate ORM (Available Time & Significant Risk)	In-depth ORM (High Risk Demanding Action)
<p>Mentally applying the basic 5 step process in the context of the appropriate troop leading/decision making process.</p> <p>- A meeting engagement</p>	<p>Designed to detect and control the risk of a specific mission usually including the following:</p> <ul style="list-style-type: none"> -A mission analysis -A preliminary hazard list -COA analysis -Back briefs and rehearsals -Integrate controls in OPORDS, FRAGOS, SOPs <p>Typical applications: Deliberate attacks</p>	<p>Detailed techniques incorporating deliberate ORM procedures but going well beyond to ensure maximum risk control. Typically limited to higher risk operations and requiring professional expertise.</p> <p>Typical applications: -New doctrinal</p>

Commands Supported By Camp Pendleton



2003 12 4

Commands Supported

- 24th Marines, Amphibious Orientation Training (AOT)
- Mountain Warfare Training Center, Bridgeport, Ca.
- 3rd Battalion, 1st Marines, 1st Marine Division

24th Marines AOT

- I&I Staff, Belton Missouri
- Risk Management Briefing to I&I Staff
- Brainstorming Session (2 days)
- Identify Hazards associated with training aboard Camp Pendleton
- Completed ORM Worksheets, briefed to individual staff
- Safety support in training areas
- Finalized with an Executive Summary

MWTC Bridgeport

- Summer Mountain Leaders Course, High Risk Training Assessment
- Winter Mountain Leader Course, High Risk Training Assessment
- Casualty Evacuations
- Range Safety Officer Certification

High Risk Training Assessment

- **Cease Training Criteria (CTC's) provide personnel with a means communicating concerns:**
 - for personal safety such as relief from pain
 - Heat/Cold stress
 - or other serious physical discomfort
- **Brief each CTC prior to training.**

High Risk Assessments provide:

- Commanders with tools to identify and reduce hazards
 - Implements ORM
 - Establishes controls
 - Ensure standards are met
- Assigns supervisor responsibility



3rd Battalion, 1st Marines

- Assist in advance reconnaissance of training areas prior to live fire training.
- Troop movement
- Surface Danger Zones (SDZ's)



ORM OFF DUTY

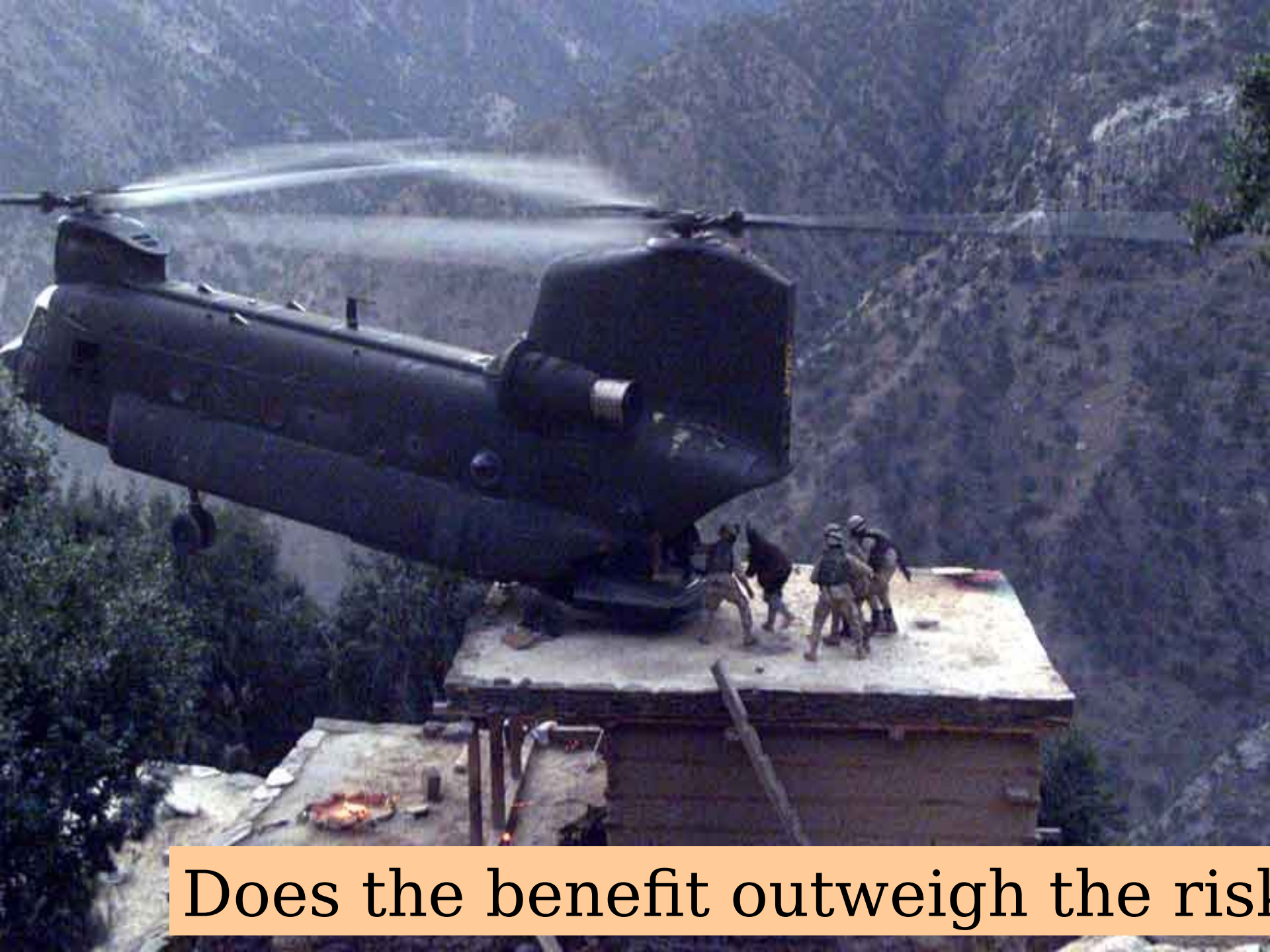
- Applying ORM only on-duty is like putting a band aid on a severed leg!!!!
- Command oversight and creative intervention CAN reduce off-duty mishap rates.

Summary

- Enhances operational mission accomplishment
- Supports well-informed decision making to implement a COA.
- Provides assessment tools to support operations.
- Enhance decision making skills based on a reasoned and repeatable process.

Summary (cont.)

- Provides improved confidence in unit capabilities. Adequate risk analyses provides a clearer picture of unit readiness.
- Preserving and protecting personnel, combat weapon systems, and related support equipment while avoiding unnecessary risk
- Provide an adaptive process for continuous feedback through the planning, preparation, and execution phases of military operations.
- Identify feasible and effective control measures where specific standards do not exist.



Does the benefit outweigh the risk

Final Note

Risk management is not an additional task, it is a process that will be incorporated into everything we do--on and off Duty. Doing so, provides reasonable alternatives for successful task accomplishment and empowers users to make informed decisions.

Questions?

